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FILE 'HCAPLUS' ENTERED AT 16:17:57 ON 21 JUL 2004 L1 1 US20040034096/PN

FILE 'REGISTRY' ENTERED AT 16:18:18 ON 21 JUL 2004

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L2 TRA L1 1- RN : 45 TERMS

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FILE COVERS 1907 - 21 Jul 2004 VOL 141 ISS 4 FILE LAST UPDATED: 20 Jul 2004 (20040720/ED)

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=> d all l1

- L1 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 2004:60452 HCAPLUS
- DN 140:128156
- ED Entered STN: 26 Jan 2004
- TI Preparation of cinnamide derivatives useful as selective MAO-B inhibitors
- IN Jolidon, Synese; Rodriguez, Sarmiento Rosa Maria; Thomas, Andrew William;
 Wostl, Wolfgang; Wyler, Rene
- PA F. Hoffmann-La Roche AG, Switz.
- SO PCT Int. Appl., 28 pp.
 CODEN: PIXXD2
- DT Patent
- LA English
- IC ICM C07C235-34 ICS C07C255-54; A61K031-165; A61K031-275; A61P025-28
- CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)

Searched by Noble Jarrell

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Section cross-reference(s): 1, 63
FAN.CNT 1
                                          APPLICATION NO. DATE
                     KIND DATE
     PATENT NO.
                                          _______
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     _____
                     A1
                           20040122
                                         WO 2003-EP7231 20030707
PΙ
     WO 2004007429
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ,
            UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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             GW, ML, MR, NE, SN, TD, TG
                           20040219
                                          US 2003-613785 20030703 <--
     US 2004034096
                    A1
PRAI EP 2002-15583
                           20020715
                      Α
    MARPAT 140:128156
GT
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
     The invention refers to cinnamide derivs. of formula I [wherein: R1 =
AB
     alkyl, halogen, halogenoalkyl, CN, alkoxy, halogenoalkoxy; R21, R22, R23,
     R24 = H \text{ or } F; R3 = H, alkyl; A = -C(R4):C(R5)-, -C(R4)(R6)-C(R7)(R5)-, or
     -C.tplbond.C-; R4, R5, R6, R7 = H, alkyl; n = 1-3] useful for treatment
     and prevention of diseases mediated by MAO-B inhibitors. Compds. I are
     especially useful for the treatment of Alzheimer's disease and senile dementia.
     For instance, compound II (example 1, IC50 = 0.083 .mu.mol for human MAO-B;
     >10,000 for human MAO-A) was prepared via etherification of 4-iodophenol by
     3-fluorobenzyl bromide, Sonogashira reaction of CH2:C(Me)CO2Me with
     obtained compound III, subsequent hydrolysis and amidation.
     cinnamide prepn MAO monoamine oxidase inhibitor
ST
     Anti-Alzheimer's agents
TT
     Human
        (preparation of cinnamide derivs. useful as MAO-B inhibitors)
IT
     Mental disorder
        (senile psychosis, treatment of; preparation of cinnamide derivs. useful as
        MAO-B inhibitors)
     Alzheimer's disease
IT
        (treatment of; preparation of cinnamide derivs. useful as MAO-B inhibitors)
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (B, inhibitors, mediated diseases; preparation of cinnamide derivs. useful
```

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as MAO-B inhibitors)
     649740-30-7P, 1-(3-Fluorobenzyloxy)-4-iodobenzene
                                                         649740-31-8P,
IT
     3-[4-(3-Fluorobenzyloxy)phenyl]-2-methylacrylic acid methyl ester
     649740-32-9P, 3-[4-(3-Fluorobenzyloxy)phenyl]-2-methylacrylic acid
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (intermediate; preparation of cinnamide derivs. useful as MAO-B inhibitors)
     649740-29-4P, 3-[4-(3-Fluorobenzyloxy)phenyl]-2-methylacrylamide
IT
     649740-33-0P, 3-[4-(3-Fluorobenzyloxy)phenyl]-2,N-dimethylacrylamide
     649740-53-4P, 3-[4-(3-Fluorobenzyloxy)phenyl]but-2-enoic acid methylamide
    RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
```

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(preparation of cinnamide derivs. useful as MAO-B inhibitors)
     649740-34-1P, 3-[4-(3-Fluorobenzyloxy)phenyl]-2-methylpropionamide
IT
     649740-35-2P, 3-[4-(3-Fluorobenzyloxy)phenyl]-2,N-dimethylpropionamide
     649740-36-3P, 3-[4-(3-Fluorobenzyloxy)phenyl]propynoic acid amide
     649740-40-9P, 1-[4-(3-Fluorobenzyloxy)phenyl]propynoic acid methylamide
     649740-41-0P, 3-[4-(3,4-Difluorobenzyloxy) phenyl] propionamide
     649740-42-1P, 3-[4-(3-Fluorobenzyloxy)phenyl]-N-methylacrylamide
     649740-45-4P, 3-[4-(3-Fluorobenzyloxy)phenyl]acrylamide
                                                               649740-46-5P,
     N-Methyl-3-[4-(4-trifluoromethylbenzyloxy)phenyl]acrylamide
     649740-47-6P, 3-[4-(3,4-Difluorobenzyloxy)phenyl]-N-methylacrylamide
     649740-49-8P, 3-[4-(4-Fluorobenzyloxy)phenyl]-N-methylacrylamide
     649740-50-1P, 3-[4-(3-Cyanobenzyloxy)phenyl]-N-methylacrylamide
     649740-51-2P, N-Methyl-3-[4-(4-methylbenzyloxy)phenyl]acrylamide
     649740-52-3P, 3-[4-(3-Methoxybenzyloxy)phenyl]-N-methylacrylamide
     649740-55-6P, 3-[4-(3-Fluorobenzyloxy)phenyl]-N-methylbutyramide
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of cinnamide derivs. useful as MAO-B inhibitors)
     93291-55-5P, 1-[4-(3-Fluorobenzyloxy)phenyl]ethanone
                                                            94530-63-9P,
IT
     3-(4-Hydroxyphenyl)-N-methylacrylamide
                                             175136-19-3P,
     3-[4-(4-Fluorobenzyloxy)phenyl]acrylic acid
                                                   423752-10-7P,
     3-[4-(3-Fluorobenzyloxy)phenyl]acrylic acid
                                                   649740-37-4P,
     [[4-(3-Fluorobenzyloxy)phenyl]ethynyl]-trimethylsilane
                                                              649740-38-5P,
                                              649740-39-6P,
     1-(3-Fluorobenzyloxy)-4-ethynylbenzene
                                                   649740-43-2P,
     [4-(3-Fluorobenzyloxy)phenyl]propynoic acid
     3-[4-(3-Fluorobenzyloxy)phenyl]acrylic acid 3-fluorobenzyl ester
     649740-44-3P, 3-[4-(3-Fluorobenzyloxy)phenyl]acryloyl chloride
     649740-48-7P, 3-[4-(3,4-Difluorobenzyloxy)phenyl]acrylic acid
     649740-54-5P, 3-[4-(3-Fluorobenzyloxy)phenyl]but-2-enoic acid methyl ester
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of cinnamide derivs. useful as MAO-B inhibitors)
     80-62-6, Methyl methacrylate 99-93-4, 4-Hydroxyacetophenone
                                                                     104-81-4,
TT
     1-Bromomethyl-4-methylbenzene
                                   402-49-3, 4-(Trifluoromethyl)benzyl
               456-41-7, 3-Fluorobenzyl bromide
                                                 459-46-1, 4-Fluorobenzyl
                                        874-98-6, 1-Bromomethyl-3-
               540-38-5, 4-Iodophenol
     bromide
                      1066-54-2, Trimethylsilylacetylene
                                                          7400-08-0, p-Cumaric
     methoxybenzene
                                                          28188-41-2,
            23838-70-2, 3-(4-Hydroxyphenyl)propionamide
                                85118-01-0, 3,4-Difluorobenzyl bromide
     3-Bromomethylbenzonitrile
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reactant; preparation of cinnamide derivs. useful as MAO-B inhibitors)
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Bentue-Ferrer, D; CNS DRUGS 1996, V6(3), P217 HCAPLUS
(2) Fournier Innovation Synergie; WO 9011997 A 1990 HCAPLUS
(3) Rano, T; TETRAHEDRON LETTERS 1995, V36(22), P3789 HCAPLUS
=> b wpix
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                            20 JUL 2004
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                                              <200446/DW>
MOST RECENT DERWENT UPDATE:
                                200446
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    NEW FORMAT GERMAN PATENT APPLICATION AND PUBLICATION
    NUMBERS. SEE ALSO:
    http://www.stn-international.de/archive/stnews/news0104.pdf <<<
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     ANSWER 1 OF 1 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
L4
ΑN
     2004-191103 [18]
                        WPIX
    C2004-075334
DNC
     New cinnamide derivatives are monoamine oxidase B inhibitors useful for
     treating e.g. Alzheimer's disease and senile dementia.
DC
IN
     JOLIDON, S; RODRIGUEZ SARMIENTO, R M; THOMAS, A W; WOSTL, W; WYLER, R
     (JOLI-I) JOLIDON S; (SARM-I) RODRIGUEZ SARMIENTO R M; (THOM-I) THOMAS A W;
PA
     (WOST-I) WOSTL W; (WYLE-I) WYLER R; (HOFF) HOFFMANN LA ROCHE & CO AG F
CYC
                     A1 20040122 (200418)* EN
                                                 28
                                                       C07C235-34
ΡI
     WO 2004007429
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            LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
         W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
            DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
            KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
            RO RU SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW
                                                       A61K031-277
     US 2004034096
                    A1 20040219 (200418)
    WO 2004007429 A1 WO 2003-EP7231 20030707; US 2004034096 A1 US 2003-613785
ADT
     20030703
PRAI EP 2002-15583
                          20020715
     ICM A61K031-277; C07C235-34
IC
     ICS A61K031-165; A61K031-275; A61P025-28; C07C255-54
     WO2004007429 A UPAB: 20040316
AB
     NOVELTY - Cinnamide derivatives are new.
          DETAILED DESCRIPTION - Cinnamide derivatives of formula (I) are new.
          R1 = 1-3C alkyl, halo, halo-(1-6C)alkyl, cyano, 1-6C alkoxy or
     halo-(1-6C)alkoxy;
          R21-R24 = H \text{ or } F;
          R3, R4 = H or 1-3C alkyl;
          A = C(R4) = C(R5), C(R4)(R6) - C(R5)(R7) or C triple bond C;
          R5-R7 = H \text{ or } 1-6C \text{ alkyl, and}
     n = 1-3.
          An INDEPENDENT CLAIM is also included for the preparation of (I).
          ACTIVITY - Nootropic; Neuroprotective; Antiparkinsonian;
     Antidepressant; Tranquilizer; Neuroleptic; Eating-Disorders-Gen.;
     Anorectic; Antiaddictive; Antismoking; Antiinflammatory.
          MECHANISM OF ACTION - Monoamine oxidase B inhibitor.
          The monoamine oxidase B enzymatic activity of 3-(4-(3-
```

fluorobenzyloxy)-phenyl)-2,N-dimethyl-propionamide (Ia) was assayed in 96-well-plates using a spectrophotometric assay adapted from the method as described in Zhou and Panchuk-Voloshina (A One-Step Fluorometric Method for the Continuous Measurement of Monoamine Oxidase Activity, Analytical Biochemistry 253:169-174 (1997)). The IC50 value of (Ia) was 0.029 micro mol.

USE - Used for treatment and prevention of Alzheimer's disease and senile dementia (claimed), acute and chronic neurological disorder, cognitive disorder, memory deficit, dementia, minimal cognitive impairment, Parkinson's disease, psychiatric diseases (e.g. depression, anxiety, panic attack, social phobia, schizophrenia, eating and metabolic disorder (e.g. obesity)), withdrawal symptoms induced by abuse of alcohol, nicotine and other addictive drugs and other neuroinflammatory diseases. Dwg.0/0

FS CPI

=>

FA AB; GI; DCN

MC CPI: B10-A15; B10-D03; B14-C03; B14-D05C; B14-E11; B14-E12; B14-J01; B14-M01

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